1. Top to Post.
2. " "
3. Middle part to Post.
4. Base.
5. Pipe Box.
6. " Cover.
7. Goose Neck.
8. " Cover.
9. Single Pulley Stand.
10. Double "
11. Pulley.
12. Short Friction Roll.
13. Short Pulley Shaft.
14. Long "
15. Main Shaft.
16. Friction Segment.
17. Shaft Cap.
18. Long Friction Roll.
19. Scored Pulley.
20. Split Pulley.
21. Secondary Scored Pulley.
22. Lugs to Scored Pulley.
23. Segment of Gear.
24. Pinion.
25. Pinion Shaft.*
26. Crank.
27. Plain Arm.
28. Linked Arm.
29. Weight Carrier.
30. Large Weight.
31. Small "
32. Spring Stop.
33. Shaft to "
34. Spring to " *
35. Chain Hook.*
36. Swivel.
37. Rod Connection.
38. Gong Plate.
39. " Hammer.
40. Pawl to "
41. Ratchet to Gong.
42. Gong.
43. Lantern Hook.*
44. " Snap.*
45. Swinging Leg.*
46. Hand Hole Plate.
47. " " "

The pieces marked with a * do not require patterns.

THE RAILWAY SAFETY GATE.

The Gates manufactured by this Company are intended to be erected at any point where a Railroad crosses a street or highway on the same grade, with a view to securing safety to the train and protection to those passing along the street.

The accompanying plates, with the detailed description, illustrate the construction of the several parts of the gate, as recently improved. We also give a few practical hints in regard to locating and setting the Gate posts, and of making the underground connections. Full instructions are also given for properly operating the Gate.

Every article, or part of the Gate is numbered on the drawings, and can be ordered from us by their respective numbers.

We are prepared to supply Railroad Companies with our Gate, or to sell to any company the right to manufacture and use our Gates upon their roads, as may be desired. The company will furnish full sets of patterns for the castings, at a reasonable price.

GENERAL DESCRIPTION OF THE RAILWAY SAFETY GATE.

On each side of the railway are two hollow iron posts, upon which are hung arms of wood, connected in such a way that by the turning of a crank on one of the posts, the arms are lowered from a vertical into a horizontal position across the street, and parallel to the rails, thus forming a barrier to the progress of pedestrians and teams along the street.

When the Gate is open there is no obstruction overhead; the posts take up but little room on the sidewalk, and the arms are in a vertical position. By turning one of the cranks, the two arms are simultaneously lowered, one on each side of the street, towards each other, their upper ends coming down and very nearly touching when they reach the horizontal position, where they are supported in their position by iron standards, which are attached to each arm. A second crank in the same post, works the two arms standing opposite each other on the other side of the track, and lowers them to a similar position. The two cranks can be worked at the same time by the gate tender, or either side can be lowered first as circumstances may require. It can also be so arranged that the arms on both sides of the track can be worked by one crank, if desired. The arms are made of wood, and are laterally braced, thus combining strength and lightness.

The Gates being perfectly balanced, are operated with little exertion, almost instantaneously; and the iron posts are so constructed as to be water-tight. The connections underground consist of suitable rods and chains which are inclosed in water-tight pipes, so that nothing can interfere with the free working of the Gate.

A flag during the day and a lantern at night are attached to one arm on each side of the track, and a gong-bell is caused to sound by the lowering of the arms, thus affording additional protection.

Crossings at any angle with the railway can be as readily fitted, and the gate as easily worked as when at right angles. Streets of great width present no difficulties to the practical operation of this Gate, and in cases where two or more crossings can be seen by the operator, gates at all such crossings can be worked from one point, either together or successively, and by one man. In crossings where it is considered that the bell will not give sufficient notice to pedestrians of approaching trains, the posts can be so placed that the arms will close the sidewalks as well as the carriage way. Sometimes in streets of extreme width, an auxiliary arm extending over the sidewalk is attached.

Suitable signals can be connected with the gate bars to indicate to the engineer of an approaching train, whether the crossing is clear. If the crossing is near a curve, distant signals can be attached and worked in connection with the gates. In streets not exceeding forty feet in width, one arm on each side of the track is usually sufficient, in which case but one post on each side is required, the arm being lowered and resting upon a permanent iron standard.

It is important that the crank post should be in the best position to command a good view of approaching trains; and in making the underground connections, to have the couplings screw firmly, the pipe to be in as straight line as possible, and a little higher in the centre of the street, and not to have the rods cross each other. There will arise many instances in which general instructions will not apply. In such cases experience will be found serviceable, and we shall always be glad to confer with parties desiring to locate a gate, and give our opinion willingly, if a plan of the location is sent to us.

PLATE . I.

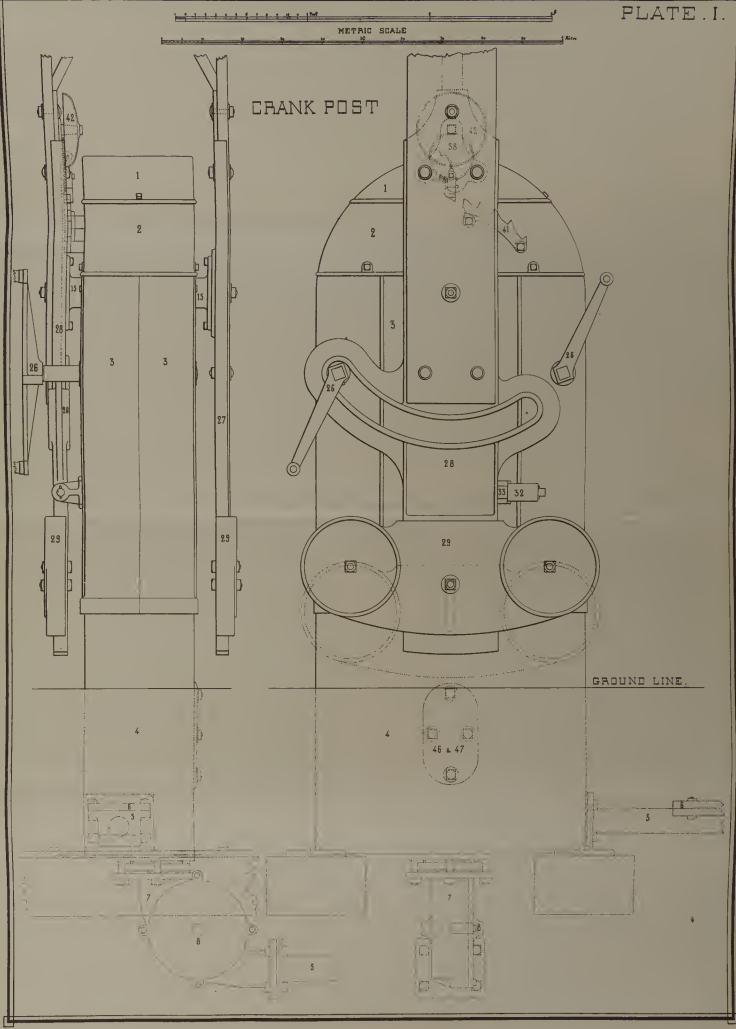


PLATE. II.

CRANK POST

INTERIOR VIEW.

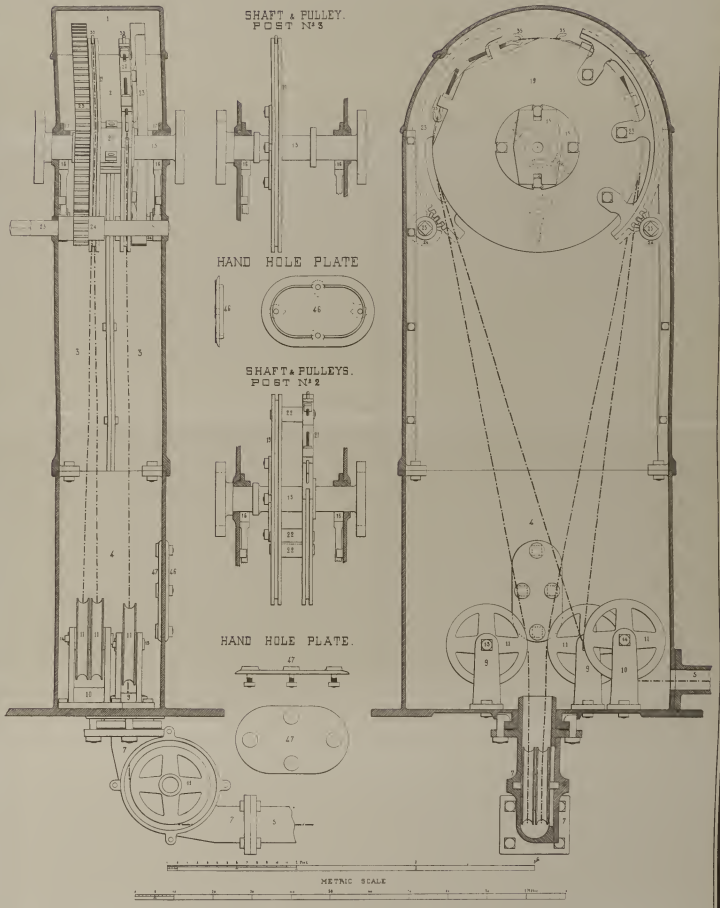
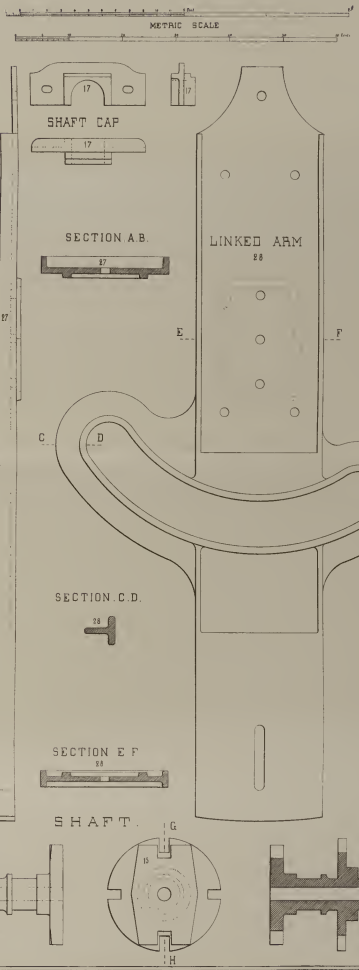


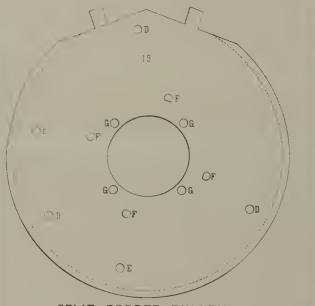
PLATE. III

DETAILS

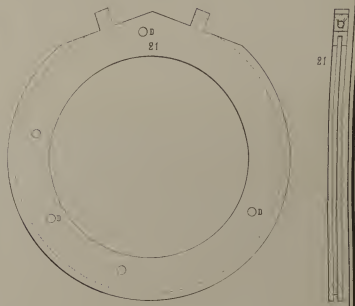


DETAILS

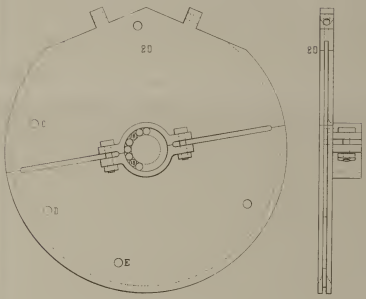
SCORED PULLEY



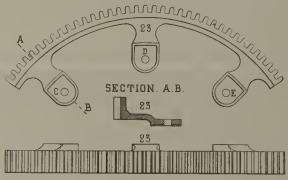
SECONDARY SCORED PULLEY



SPLIT SCORED PULLEY

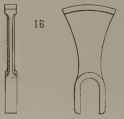


SEGMENT OF GEAR



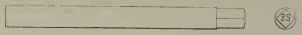
FRICTION SEGMENT

LONG FRICTION ROLL



PINION SHAFT

25



PINION

CRANK

26

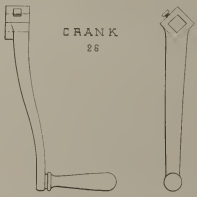
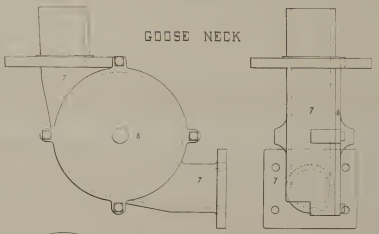


PLATE V.

DETAILS

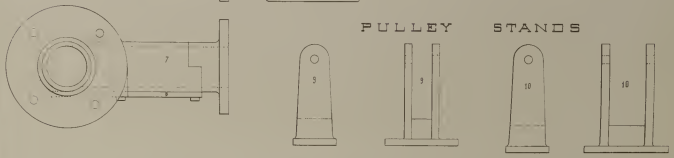
GOOSE NECK



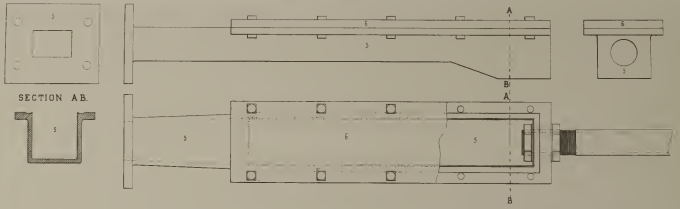
CHAIN PULLEY

CHAIN PULLEY SHAFTS

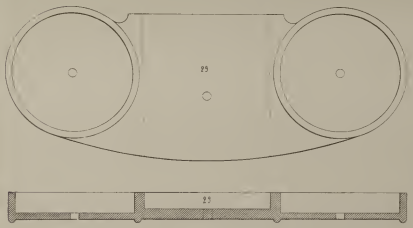
PULLEY STANDS



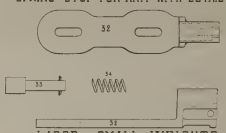
PIPE BOX



WEIGHT CARRIER

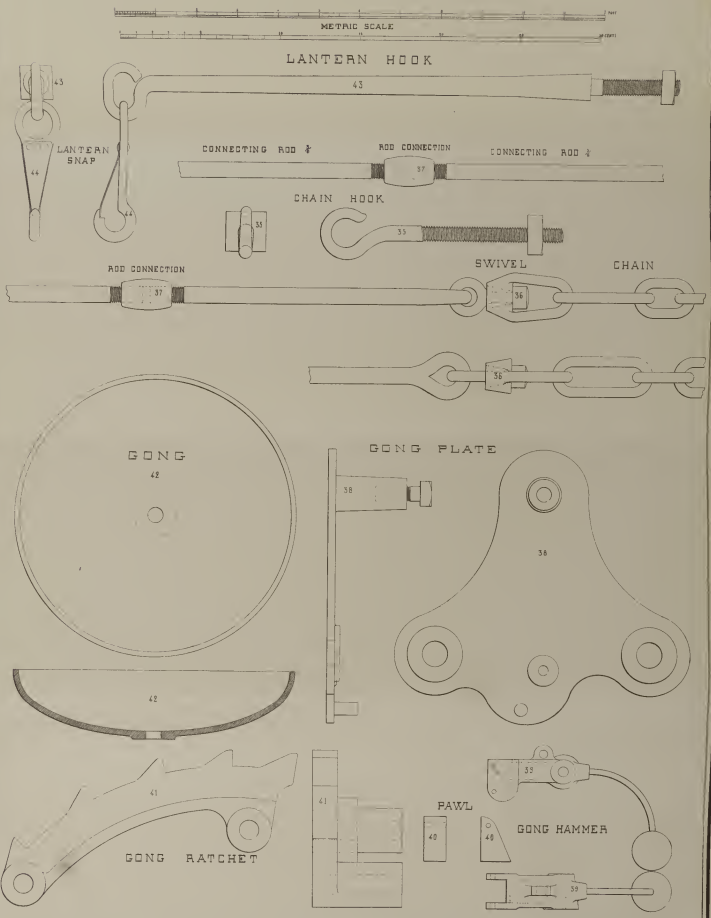


SPRING STOP FOR ARM WITH DETAILS



LARGE & SMALL WEIGHTS

DETAILS


METRIC SCALE
LANTERN HOOK
43
LANTERN SNAP
44
CONNECTING ROD ⅜
ROD CONNECTION
37
CONNECTING ROD ⅜
CHAIN HOOK
35
ROD CONNECTION
SWIVEL
CHAIN
36
GONG
42
GONG PLATE
38
GONG RATCHET
41
PAWL
40
GONG HAMMER
39

PLAN OF A 4 POST GATE

&

DETAILS OF WOODEN ARM

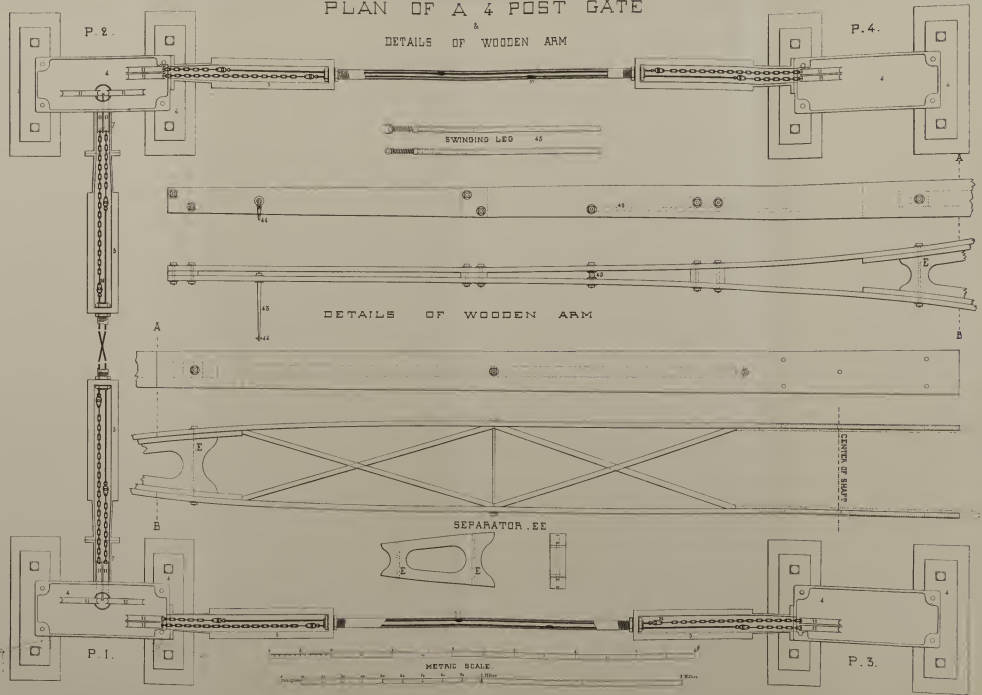
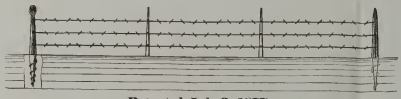


PLATE VII

Railway Safety Gate Co.
Pawtucket R.I.

THE

IRON SCREW POST!



Patented July 3, 1877.

H. H. ROBERTS, PROPRIETOR.

The screw flanges intersect each other at right angles, giving great strength to the Post. In these flanges are slots, into which the wire is fastened, when it is tightened to the right tension.

We challenge the world to produce any style of Fence having so many points in its favor as the Barbed Wire Fence constructed with this Post. We are pleased that we can call attention to the following points and facts with confidence:

1. Time is money.
2. No fence can be built in so short a time, and so cheap as this.
3. It can be screwed into the ground in less time and firmer than any other post.
4. If you want to move your fence it can be done comparatively at no cost.
5. It takes less posts than any other style of fence.
6. Wind and fire will not affect it, water will not carry it away.
7. Your crops are safe with it.
8. It saves you money and repairs.
9. It is good for all time. It will not rot.
10. It was invented by a practical farmer, who has met a demand.
11. The Iron Screw Post is superior to any other, and is adapted to any iron fence.
12. A fence built with this post will last a lifetime without yearly expense of repairs.
13. It is the best Post that can be made.
14. An iron fence can be made with this Post at 60 to 70 cents a rod.

For Farm, County or State Rights,

Or THE RIGHT TO MANUFACTURE, Address

H. H. ROBERTS,

Michigan City, Indiana.

HERALD PRINT, LA PORTE, IND.